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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/828,293

04/21/2004

Kazuhiro Satoh

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09/10/2007

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EXAMINER

PERVAN, MICHAEL

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

09/10/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/828,293

Applicant(s)

SATO ET AL.

Examiner

Michael Pervan

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5,8,14-16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,8,14-16 and 18-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 5, 8, 14-16 and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Johnson et al (US 2004/0164939).

In regards to claim 1, Johnson discloses a self-light-emitting module comprising a light-emitting display panel in which a number of pixels using a self-light-emitting element (LEDs) with an electric polarity are arranged in a matrix manner, and a lighting drive device for selective lighting drive of the self-light-emitting elements on the light-emitting display panel (Fig. 2 and paragraph 19), wherein

a malfunction detection unit (current measurement capability), by which malfunction in light emitting caused by defects in the light-emitting display panel, the lighting drive device, or a connecting portion between the light-emitting display panel and the lighting drive device is detected, is further provided (paragraphs 20-23; the malfunction detection unit (current measurement capability) measures the leakage current and detects weak or deteriorating diodes).

said malfunction detection unit having a configuration by which a value of a current passing in the non-light-emitting direction of the self-light-emitting element can be measured and in which the value of the current is at least measured after a first predetermined time has passed from the starting point and after a second predetermined time has passed from the starting point such that a defect pattern in the light-emitting display panel, the lighting drive device, or the connecting portion between the light-emitting display panel and the lighting drive device is identified (paragraph 24; a first predetermined time would be one hour and a second predetermined time would be another hour).

In regards to claim 5, Johnson discloses the self-light-emitting module according to claim 1, wherein the malfunction detection unit has a configuration by which the coordinate of a pixel using the self light-emitting element arranged on the light-emitting display panel can be detected (paragraphs 25-26; the exact location of a malfunction (weak diode) can be detected from among all pixels).

In regards to claim 8, Johnson discloses claim 1 or claim 5, wherein said defect pattern is characterized in any one of the states in which the paths in said lighting drive device and said light-emitting display panel are normal, in which the paths in said lighting drive device and said light-emitting display panel are broken and in which the paths in said lighting drive device and said light-emitting display panel are short circuited (paragraph 7).

In regards to claims 14, Johnson discloses claim 5, further comprising a storage notification unit into which a coordinate of a pixel with a malfunction in the light- emitting

is written and which performs a notification function on the basis of said written coordinate of the pixel (paragraph 24).

In regards to claim 15, the self-light-emitting module according to claim 14, wherein said storage notification unit performs said notification function in case said written coordinate of the pixel with a malfunction in the light-emitting corresponds to a coordinate at a predetermined position (paragraph 24).

In regards to claim 16, the self-light-emitting module according to claim 14, having a configuration by which said storage notification unit is stored with said defect patterns such that the notification function is performed on the basis of the stored coordinate of the pixel with the malfunction in the light emitting and said stored defect patterns (paragraph 24).

In regards to claim 18, Johnson discloses a method for verifying a defect state of a self-light-emitting display module comprising a light-emitting display panel in which a number of pixels using a self-light-emitting element with an electric polarity are arranged in a matrix manner (paragraph 19), a lighting drive device for selective lighting drive of the respective self-light-emitting elements on the light-emitting display panel (paragraph 19; lighting drive device (driving means 1), a malfunction detection unit (current measurement capability), by which malfunction in light emitting caused by defects in the light-emitting display panel, the lighting drive device, or a connecting portion between the light-emitting display panel and the lighting drive device is detected (paragraphs 20-23; the malfunction detection unit (current measurement capability) measures the leakage current and detects weak or deteriorating diodes),

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wherein the malfunction detection unit sequentially executes

a current supply step at which a current is supplied in a non-light-emitting direction of the element (paragraphs 21 and 22; since  $V=IR$  and a voltage is being supplied, therefore a current is being supplied);

a current-value measure step at which a value of a current passing in a pixel including the self-light-emitting element at least after a first predetermined time has passed from the starting point for supplying the current and a second predetermined time has passed (paragraphs 22 and 24; a first predetermined time would be one hour and a second predetermined time would be another hour); and

a determination step at which the presence of a defect in the light-emitting display panel, the lighting drive device, or the connecting portion between the light-emitting display panel and the lighting drive device is determined by a value of a current measured at the current-value measure step and the coordinate of the pixel with malfunction in the light emitting is sequentially detected to identify the defect pattern thereof (paragraph 22), and

a storage notification unit for performing a notification function on the basis of the presence/absence of defects determined by said determination and said coordinate or the defect patterns is activated according to the defect state determined at the determination step (paragraph 24).

In regards to claim 19, Johnson discloses the method for verifying a defect state of a self-light-emitting display module according to claim 18, wherein

the storage notification unit is activated according to a position of a defective pixel on the light-emitting display panel when the presence of a defect in a pixel arranged on the light-emitting display panel is identified at the determination step (paragraph 24).

In regards to claim 20, Johnson discloses the method for verifying a defect state of a self-light-emitting display module according to claim 18 or 19, wherein the current supply step, the current-value measure step, and the determination step are executed for each row or for each column of the self-light-emitting elements arranged in a matrix manner (paragraphs 22 and 25-26).

In regards to claim 21, Johnson discloses the self-light-emitting module according to claim 8, further comprising a storage notification unit into which a coordinate of a pixel with a malfunction in the light-emitting is written and which performs a notification function on the basis of said written coordinate of the pixel (paragraph 24).

### ***Response to Arguments***

3. Applicant's arguments filed June 21, 2007 have been fully considered but they are not persuasive.

Applicant (on page 8 of arguments) argues that Johnson does not teach the newly amended and added claims. Examiner respectfully disagrees.

The examiner would like to refer to the detailed office action above for how the reference teaches the amended claims and new claim.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pervan whose telephone number is (571) 272-0910. The examiner can normally be reached on Monday - Friday between 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVP  
Aug. 28, 2007

AMR A. AWAD  
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read "Amr A. Awad", with a large, sweeping flourish at the end.